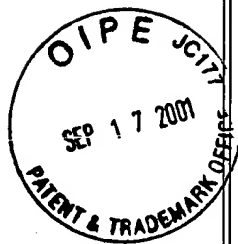PATENT
Customer No. 22,852
Attorney Docket No. 06502.0023

APPEAL TO THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re Application of:)
)
John TANG et al.   )
)
Serial No.: 08/885,597   )   Group Art Unit: 2173
)
Filed: June 30, 1997   )   Examiner: T. Joseph
)
For: ANIMATED INDICATORS THAT REFLECT   )
     FUNCTION, ACTIVITY, OR STATE OF   )   **RECEIVED**
     OBJECTS, DATA, OR PROCESSES   )
                                                  SEP 1 9 2001

Assistant Commissioner for Patents
Washington, D.C. 20231   Technology Center 2100

Sir:

APPEAL BRIEF

In support of its Notice of Appeal filed June 28, 2001, and pursuant to 37 C.F.R. § 1.192,

Appellants present in triplicate their Appeal Brief accompanied by a check in the amount of

$300.00 to satisfy the fee under 37 C.F.R. § 1.17(c). This is an appeal to the Board of Patent

Appeals and Interferences from a decision finally rejecting claims 1-32. The appealed claims are

set forth in the Appendix. If additional fees are required or if the enclosed payment is

insufficient, please charge the deficiencies to Deposit Account No. 06-0916. If a fee is required

for an extension of time under 37 C.F.R. § 1.136 and such fee is not accounted for above,

Appellants petition for such an extension and request that the fee be charged to Deposit Account

No. 06-0916.

I.   REAL PARTY IN INTEREST

Sun Microsystems, Inc. is the current assignee of the present application.

II.   RELATED APPEALS AND INTERFERENCES

There are no known related pending appeals or interferences directly affected by or having a bearing on the decision in the pending appeal.

III.   STATUS OF CLAIMS

Claims 1-32 have been twice rejected and are the subject of this appeal. The claims on appeal are set forth under the heading "APPENDIX" at the end of this Brief. In the March 28, 2001, Office Action, the Examiner rejected claims 1, 13, 29, 31, and 32 under 35 U.S.C. § 103(a) as being unpatentable over Baecker et al. (U.S. Patent No. 5,479,602) in view of Johnston, Jr. et al. (U.S. Patent No. 5,880,729); claims 2-4, 10, 14, and 16 under 35 U.S.C. § 103(a) as being unpatentable over Baecker et al. and Johnston, Jr. et al. as applied to claims 1 and 13, and further in view of Gudmundson et al. (U.S. Patent No. 5,680,619); claims 5-6, 9, 11-12, 15, 17, and 18 under 35 U.S.C. § 103(a) as being unpatentable over Baecker et al., in view of Johnston, Jr. et al. in view of Gudmundson as applied to claims 1 and 2, and further in view of Gallagher (Computer Visualization: Graphics Techniques for Scientific and Engineering Analysis); claims 7, 19-21, 25, and 30 under 35 U.S.C. § 103(a) as being unpatentable over Johnston, Jr. et al.; claims 22-24 and 26 under 35 U.S.C. § 103(a) as being unpatentable over STN Express in view of Johnston, Jr. et al. in view of Nguyen et al. (U.S. Patent No. 5,978,840); claims 27 and 28 under 35 U.S.C.

§ 103(a) as being unpatentable over <u>Baecker et al.</u> in view of <u>STN Express</u> in view of <u>Lagarde et al.</u> (U.S. Patent No. 5,721,908) in view of <u>Johnston, Jr. et al.</u>; and claim 8 under 35 U.S.C. § 103(a) as being unpatentable over <u>Johnston, Jr. et al.</u> as applied to claim 7 in view of <u>Gallagher</u>.

IV.   STATUS OF AMENDMENTS

No Amendment has been filed subsequent to the March 28, 2001, Office Action.

V.   SUMMARY OF INVENTION

Animated icons are utilized by some computer systems to allow a user to more easily associate the icon with its functionality. Typical animated icons, however, reveal little information about the objects that they represent. For example, although the icons inform the user of the general functionality of the object represented, they fail to inform the user of the amount or quality of the data manipulated by the objects. In other words, typical animated icons do not reveal information about the particular state of the objects they represent.

Systems and methods consistent with the present invention address this problem by providing animated indicators that monitor the state of a software container (for example, an object) and reflect the state of the container, potentially including information such as amount, type, and activity of the container. As the state of the container changes, an animation routine that may constitute an icon representing the container changes based on a determination associated with the state changes. In this manner, users are presented with up-to-date and detailed information about a container represented by a small graphic pictorial. Thus, the user receives a continuous supply of useful information about the container without having to, for

example, select and view the contents of the container as a full screen representation.

VI.   ISSUES

The issues in this Appeal Brief are:

A.   Whether the Examiner's rejection of claims 1, 13, 29, 31, and 32 under 35 U.S.C.

§ 103(a) as being unpatentable over Baecker et al. in view of Johnston, Jr. et al. can be affirmed

when the references do not teach or suggest 1) determining based on the detected event whether

an animated sequence does not reflect the state of the container; and 2) detecting an event

reflecting a change in the state of the container, wherein the container is a web page related to

user discussion.

B.   Whether the Examiner's rejection of claims 2-4, 10, 14, and 16 under 35 U.S.C.

§ 103(a) as being unpatentable over Baecker et al. and Johnston, Jr. et al. as applied to claims 1

and 13, and further in view of Gudmundson et al. can be affirmed when the Examiner did not

satisfy the initial burden of factually supporting a prima facie case of obviousness.

C.   Whether the Examiner's rejection of claims 5-6, 9, 11-12, 15, 17, and 18 under 35

U.S.C. § 103(a) as being unpatentable over Baecker et al. in view of Johnston, Jr. et al. in view of

Gudmundson as applied to claims 1 and 2, and further in view of Gallagher can be sustained

when the references do not teach or suggest 1) that the cyclical display uses of one of color

variations, tempo, motion, and change in size to represent the degree of change in the state of the

container; and 2) that the cyclical display uses one of color variations, tempo, motion, and change

in size to reflect the number or type of the objects in the container.

D.   Whether the Examiner's rejection of claims 7, 19-21, 25, and 30 under 35 U.S.C. § 103(a) as being unpatentable over <u>Johnston, Jr. et al.</u> can be sustained when the reference does not teach or suggest 1) determining based on the detected event whether an animated sequence does not reflect the state of the container; and 2) detecting activity of the closed container and updating an animated sequence so as to reflect activity of the closed container.

E.   Whether the Examiner's rejection of claims 22-24, and 26 under 35 U.S.C. § 103(a) as being unpatentable over <u>STN Express</u> in view of <u>Johnston, Jr. et al.</u> in view of <u>Nguyen et al.</u> can be sustained when the references do not teach or suggest updating an animated sequence to be displayed on the first computer system so as to reflect the actions of the second computer system.

F.   Whether the Examiner's rejection of claims 27 and 28 under 35 U.S.C. § 103(a) as being unpatentable over <u>Baecker et al.</u> in view of <u>STN Express</u> in view of <u>Lagarde et al.</u> in view of <u>Johnston, Jr. et al.</u> can be sustained when the references do not teach or suggest 1) detecting activity of the closed container, and updating an animated sequence so as to reflect activity of the closed container; and 2) updating an animated sequence to be displayed on the first computer system so as to reflect the actions of the second computer system.

G.   Whether the Examiner's rejection of claim 8 under 35 U.S.C. § 103(a) as being unpatentable over <u>Johnston, Jr. et al.</u> as applied to claim 7, in view of <u>Gallagher</u> can be sustained when the references do not teach or suggest that the cyclical display provides an intuitive representation of a degree of the change in the state of the container.

VII.   GROUPING OF CLAIMS

In the claims on appeal, claims 1, 7, 13, 19, 22, 25, 26, 27-28, and 32 are the independent claims. The claims on appeal do not stand or fall together. These claims should be considered in seven groups:

Group I: 1, 13, 29, 31;

Group II: 32;

Group III: 7, 30;

Group IV: 19-21, 25, 27;

Group V: 22-24, 26, 28;

Group VI: 2-4, 8-10, 14-16; and

Group VII: 5-6, 11-12, 17-18.

The claims have been placed in these groups due to their common subject matter. But Appellants have addressed the outstanding rejections in sections based on the rejections themselves instead of this grouping.

VIII.   ARGUMENTS

A.   **The Examiner's Rejection of Claims 1, 13, 29, 31, and 32 Under 35 U.S.C. § 103(a) as Being Unpatentable Over Baecker et al. in View of Johnston, Jr. et al. Must Be Reversed Because 1) the References Do Not Teach or Suggest Determining Based on the Detected Event Whether an Animated Sequence Does Not Reflect the State of the Container, and Detecting an Event Reflecting a Change in the State of the Container, Wherein the Container Is a Web Page Related to User Discussion; and 2) the Examiner Did Not Satisfy the Initial Burden of Factually Supporting a Prima Facie Case of Obviousness.**

Appellants traverse the rejection of claims 1, 13, 29, 31, and 32 as being unpatentable over Baecker et al. in view of Johnston, Jr. et al. because the Examiner has failed to establish a prima facie case of obviousness.

The Examiner's rejection should be reversed because Baecker et al. and Johnston, Jr. et al., alone or in combination, fail to teach or suggest 1) determining based on the detected event whether an animated sequence does not reflect the state of the container; and 2) detecting an event reflecting a change in the state of the container, wherein the container is a web page related to user discussion. In addition to the deficiencies in showing the features of Appellants' claimed invention, the rejection of claims 1, 13, 29, 31, and 32 are improper because the Examiner did not establish a proper suggestion or motivation to combine the reference teachings.

To establish a prima facie case of obviousness, two basic criteria must be met. First, the prior art reference as modified must teach or suggest all the claim elements. Second, there must be some suggestion or motivation, either in the reference or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or combine the reference teachings. See M.P.E.P. § 2143. In rejecting claims 1, 13, 29, 31, and 32, the Examiner has failed to establish a prima facie case of obviousness.

Claim 1 is drawn to a process for reflecting a state of a software container having objects. The claimed process involves cyclically displaying a series of frames reflecting a state of the container as an animated sequence, detecting an event reflecting a change in the state of the container, determining based on the detected event whether an animated sequence does not reflect the state of the container, and updating the cyclical display based on the determination.

In an attempt to establish a prima facie case of obviousness, the Examiner alleged, on page 2 of the Office Action dated March 28, 2001, that Baecker et al. disclose the modification of an animation icon when a corresponding file or folder changes, so that new animation frames are generated. The Examiner admitted, however, that Baecker et al. fail to teach transitional visual effects or animation for allowing users to view the transition of an object between two different static states of elements and relied on Johnston, Jr. et al. to teach that feature. The Examiner alleged that Johnston, Jr. et al. disclose detecting an event reflecting a change in the state of the container. The Examiner also alleged that it would have been obvious to determine based on a detected event whether an animated sequence does not reflect the state of the container because doing so allows the user to detect whether a change has occurred to a computer file while the user passively observes without entering additional inputs.

Appellants respectfully submit that the Examiner has failed to establish that the references teach or suggest all the claim elements. Baecker et al. disclose an apparatus and method for generating and displaying a content-based animated depiction of a standard icon. The animated depiction reflects the state of a folder that has several files in it and can change the animation scenario whenever the folder represented by the animated icon is modified (col. 8, line 58 - col. 9, line 6). In contrast, the animated sequence, according to one aspect of the present

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invention, is changed when it has been determined that an animated sequence does not reflect the state of a container. In this manner, unnecessary update cycles can be eliminated thereby improving performance. This is reflected in the written description with regard to an implementation of the present invention. Upon the detection of the event that reflects a change in state, animated indicator program 206, through monitor program 208, determines whether the state of the software container has changed enough to warrant a revised animation cycle (page 7, lines 1-3). If there has not been enough of a state change, for example, then no revised animation cycle is needed, such that the system does not even attempt to update the cyclical display when an update is not necessary. The state of a container may refer to information such as the number, type, and activity of objects in the container. Activity of objects may refer to, among other things, how recently objects have been added to or deleted from the container, or the rate at which objects have been added to or deleted from the container (page 10, lines 4-9).

In Baecker et al., on the other hand, updates occur every time there is a folder modification, thus wasting valuable time if it turns out that the animation scenario does not have to be changed at all. In other words, Baecker et al. keep its cyclical display accurate by regenerating the frames that constitute the cyclical display every time a modification to the folder occurs. There is no quality control as to whether the regeneration is needed. For example, if a user of the system in the Baecker et al. reference were to delete one file and create another file in between update cycles, the system would detect that a folder modification has occurred and cause a regeneration of the frames. In this case, however, a regeneration was not needed because the number of files in the folder remained the same. Thus, the system performed a regeneration that was not necessary to ensure that the cyclical display reflected the state of the folder. In contrast,

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a system consistent with the present invention eliminates that unnecessary regeneration by determining whether the animated sequence reflects the state of the folder. Accordingly, Baecker et al. do not disclose or suggest the step of determining based on the detected event whether an animated sequence does not reflect the state of the container.

The teachings of Johnston, Jr. et al. are not sufficient to make up for the deficiencies of Baecker et al. As stated by the Examiner, Johnston, Jr. et al. disclose the use of animation for allowing users to view the transition of an object between two different static states of elements within a GUI. There is nothing in Johnston, Jr. et al., however, to suggest determining based on the detected event whether an animated sequence does not reflect the state of the container. On page 3 of the Office Action dated March 28, 2001, the Examiner argued that Johnston, Jr. et al. teach that "the display of an animated icon when another element …changes … can be interpreted as detecting an event reflecting a change in the state of the container." Appellants submit that animation only while the state is being changed is not sufficient to teach determining whether an animated sequence does not reflect the state of the container. Animating only while the state is being changed might be evidence that an update of the animated sequence occurs, but does not prove that a separate determination occurs. Systems and methods consistent with the present invention include both a determination and an update. Also, the "find" button in the Johnston, Jr. et al. reference is relied on by the Examiner as showing an animated sequence that reflects the state of a container. There is nothing at all in Johnston, Jr. et al. that discloses or suggests determining whether the "find" button does not reflect the state of a container.

Furthermore, the Examiner did not even allege that Johnston et al. disclose determining based on the detected event whether an animated sequence does not reflect the state of the

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container. The Examiner apparently attempted to utilize <u>Johnston et al.</u> to show the claimed detecting step, and then went on to allege that the determining step is obvious. This bolsters the Appellants' assertion that <u>Johnston et al.</u> do not disclose such a determining step. Accordingly, neither <u>Baecker et al.</u> nor <u>Johnston et al.</u> disclose or suggest the step of determining based on the detected event whether an animated sequence does not reflect the state of the container. The combination of <u>Baecker et al.</u> and <u>Johnston et al.</u> also fails to teach this claim element. Based on the foregoing, Appellants submit that the Examiner has failed to establish a prima facie case of obviousness with respect to claim 1.

Appellants also respectfully submit that the Examiner has failed to establish a suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to combine the reference teachings. The Examiner's rejection is unclear as to exactly what claim limitation(s) is/are missing from each reference and exactly how the references should be combined. For example, the Examiner asserted that <u>Baecker et al.</u> fail to teach transitional visual effects, or animation for allowing users to view the transition of an object between two different static states of elements within the GUI. None of the claims, however, include similar language, making the rejection vague. Instead, the Examiner made a series of naked obviousness statements directed to the claim elements. These statements of obviousness do not include a suggestion or motivation to modify or combine the references and are not proper. Nevertheless, the Examiner asserted that it would have been obvious to determine based on a detected event whether an animated sequence does not reflect the state of the container because doing so allows the user to detect whether a change has occurred to a computer file without the need for extra input. Appellants respectfully disagree with that

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position. As explained before, neither Baecker et al. nor Johnston et al. disclose the aforementioned determining step.

Moreover, Baecker et al. actually teach away from such a determination. Baecker et al. disclose that when an object is modified, the associated animation is regenerated on a periodic basis (col.8, lines 63-65). This regeneration on a periodic basis is essentially an unconditional update of the frames that constitute the animation. Periodic regeneration is unconditional because the regeneration occurs every given time period without checking other factors. Also, Baecker et al. disclose that the process for generating frames should be performed whenever the file or folder represented by the animated icon is modified (col. 8, lines 58-61). The word "whenever" indicates that the update occurs unconditionally. There is no check to determine whether the update should occur.

On the other hand, systems and methods consistent with the present invention utilize an update function that occurs conditionally based on whether the current animation sufficiently reflects the state of the container. It is not obvious to change an unconditional update, such as that taught by Baecker et al., to a conditional update, such as that taught by principles consistent with aspects of the present invention. Furthermore, there is no teaching or suggestion in either Baecker et al. or Johnston et al. to alter the combined system of the references so that there is an update conditional on an animated sequence matching the container state. Accordingly, it would not have been obvious to determine based on a detected event whether an animated sequence does not reflect the state of the container. Based on the foregoing, Appellants submit that the Examiner has failed to establish a prima facie case of obviousness with respect to claim 1.

Claim 13 is drawn to a computer readable medium containing instructions executable on a computer. The instructions are executable to perform a method substantially the same as that described above in claim 1. Accordingly, Appellants respectfully submit that this claim is patentable for at least the reasons given with respect to claim 1.

Claims 29 and 31 depend from claims 1 and 13, respectively, and require that the frames include characteristics that are symbolic of objects of the container. Appellants respectfully submit that these claims are patentable for least the reasons given with respect to claims 1 and 13.

Claim 32 is drawn to a process for reflecting a state of a software container having objects. The process involves cyclically displaying a series of frames reflecting a state of the container as an animated sequence; detecting an event reflecting a change in the state of the container, wherein the container is a web page related to user discussion; determining based on the detected event whether an animated sequence does not reflect the state of the container; and updating the cyclical display based on the determination. Appellants respectfully submit that this claim is patentable for at least the reasons given with respect to claim 1, and for the additional reasons presented below.

With respect to claim 32, the Examiner alleged that:

Any process resulting from the activation of an icon can be interpreted as detecting an event reflecting a change in the state of the container, wherein the container is a separate page related to user discussion. Icons used for linking to a URL is a container containing a web page related to user discussion.

Office Action of March 28, 2001, page 3, lines 6-9.

Appellants submit that neither Baecker et al. nor Johnston, Jr. et al. disclose or suggest detecting an event reflecting a change in the state of the container, wherein the container is a web page related to user discussion. The Examiner has made the allegation that icons used for linking to a URL is a container containing a web page related to user discussion. Neither Baecker et al. nor Johnston, Jr. et al. disclose an icon for linking to a URL.

Moreover, assuming, *arguendo*, that such an icon is disclosed, the icon still cannot be considered a container that is a web page related to user discussion. In systems and methods consistent with the present invention recited in claim 32, a web page related to user discussion is a web page with pointers to a variety of discussion forums in which users may post questions, respond with answers, and respond with comments (see specification, page 4). When an event reflecting a change in the state of web page occurs (e.g., a user posts a new question), that event is detected, and a cyclical display may accordingly be updated. Neither Baecker et al. nor Johnston, Jr. et al. disclose detecting an event in such a user-discussion based web page. Accordingly, neither Baecker et al. nor Johnston, Jr. et al., alone or in combination, disclose or suggest detecting an event reflecting a change in the state of the container, wherein the container is a web page related to user discussion. Based on this additional argument, Appellants submit that the Examiner has failed to establish a prima facie case of obviousness with respect to claim 32.

B. **The Examiner's Rejection of Claims 2-4, 10, 14, and 16 Under 35 U.S.C. § 103(a) as Being Unpatentable Over <u>Baecker et al.</u> and <u>Johnston, Jr. et al.</u> as Applied to Claims 1 and 13, and Further in View of <u>Gudmundson et al.</u> Must Be Reversed Because the Examiner Did Not Satisfy the Initial Burden of Factually Supporting a Prima Facie Case of Obviousness.**

Appellants traverse the rejection of claims 2-4, 10, 14 and 16 under 35 U.S.C. § 103(a) as being unpatentable over <u>Baecker et al.</u> and <u>Johnston, Jr. et al.</u> as applied to claims 1 and 13, and further in view of <u>Gudmundson et al.</u> The Examiner's rejection should be reversed because the Examiner did not establish a proper suggestion or motivation to combine the reference teachings.

Claims 2 and 14 depend from claims 1 and 13, respectively, and require that the cyclical display provides an intuitive representation of a degree of the change in the state of the container. These claims are patentable, at least, in view of their dependence from claims 1 and 13, respectively. The Examiner seemingly relied on <u>Gudmundson et al.</u> to teach providing an intuitive representation of a degree of the change in the state of the container. On page 4 of the Office Action dated March 28, 2001, the Examiner alleged that it is obvious to one of ordinary skill in the art to incorporate <u>Gudmundson et al.</u> into the process taught by <u>Baecker et al.</u>, wherein the cyclical display provides an intuitive representation of a degree of the change in the state of the container, because doing so allows the user to view and track changes without the need for additional input.

Appellants respectfully submit that the Examiner has failed to establish a proper suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to combine the reference teachings. An intuitive representation of a degree of change refers to varying the appearance of the animation cycle such

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that the degree of change in the state of the container is apparent by looking at the animation cycle. Appellants can find no disclosure or suggestion in <u>Baecker et al.</u>, <u>Johnston, Jr. et al.</u>, or <u>Gudmundson et al.</u> that providing an intuitive representation of a degree of the change in the state of the container would allow the user to view and track changes without the need for additional input. Therefore, the Examiner's stated motivation of allowing the user to view and track changes without the need for additional input is apparently an impermissible use of hindsight based on the Appellants' invention. Appellants respectfully submit that the Examiner has failed to provide a prima facie case of obviousness, and that therefore, claims 2 and 14 are patentable over the cited references.

Claim 3 depends from claim 1 and requires that the cyclical display reflects the numbers and types of the objects. This claim is patentable, at least, in view of its dependence from claim 1.

Claims 4, 10, and 16 depend from claims 1, 7, and 13, respectively, and require that the cyclical display embeds audio information in the generated frames. These claims are patentable, at least, in view of their dependence from claims 1, 7, and 13, respectively.

C. **The Examiner's Rejection of Claims 5-6, 9, 11-12, 15, 17, and 18 Under 35 U.S.C. § 103(a) as Being Unpatentable Over <u>Baecker et al.</u> in View of <u>Johnston, Jr. et al.</u> in View of <u>Gudmundson</u> as Applied to Claims 1 and 2, and Further in View of <u>Gallagher</u> Must Be Reversed Because 1) the References Do Not Teach or Suggest That the Cyclical Display Uses of One of Color Variations, Tempo, Motion, and Change in Size to Represent the Degree of Change in the State of the Container, and That the Cyclical Display Uses One of Color Variations, Tempo, Motion, and Change in Size to Reflect the Number or Type of the Objects in the Container; and 2) the Examiner Did Not Satisfy the Initial Burden of Factually Supporting a Prima Facie Case of Obviousness.**

Appellants traverse the rejection of claims 5-6, 9, 11-12, 15, 17 and 18 under 35 U.S.C.

§ 103(a) as being unpatentable over <u>Baecker et al.</u> in view of <u>Johnston, Jr. et al.</u> in view of

<u>Gudmundson</u> as applied to claims 1 and 2, and further in view of <u>Gallagher</u>.

The Examiner's rejection should be reversed because <u>Baecker et al.</u>, <u>Johnston, Jr. et al.</u>,

<u>Gudmundson</u>, and <u>Gallagher,</u> alone or in combination, fail to teach or suggest that 1) the cyclical

display uses of one of color variations, tempo, motion, and change in size to represent the degree

of change in the state of the container, and 2) the cyclical display uses one of color variations,

tempo, motion, and change in size to reflect the number or type of the objects in the container. In

addition to the deficiencies in showing the features of Appellants' claimed invention, the

rejection of claims 5-6, 9, 11-12, 15, 17 and 18 are improper because the Examiner did not

establish a proper suggestion or motivation to combine the reference teachings.

Claims 5, 11, and 17 depend from claims 2, 8, and 14, respectively, and require the use of

one of color variations, tempo, motion, and change in size to represent the degree of change in

the state of the container. These claims are patentable, at least, in view of their dependence from

claims 2, 8, and 14, respectively, and for the additional reasons presented below.

On pages 6-7 of the Office Action dated March 28, 2001, the Examiner alleged that

Gallagher discloses, among other things, using different rates of changing frames dependent on the quality of information, color cycling for mapping a sequence of moving events onto a range of color indices, and using color cycling for fluid flow through a container. The Examiner also alleged that Gudmundson discloses providing an object and view menu where color, sound, motion, and size data corresponding to an object represented by a fish can be modified, and that it is obvious to use one of color variations, tempo, motion, and change in size to represent the degree of change in the state of the container because doing so signals information regarding object state while reducing the need for the user to change physical position for the entering of input and the viewing of an output display.

Appellants respectfully disagree with the Examiner's position. The combined teachings of the references fail to disclose using one of color variations, tempo, motion, and change in size to represent the degree of change in the state of the container. The references relied on by the Examiner merely teach that various features (e.g., color, tempo, etc.) can be altered in a given animation. The ability to alter the color or rate of frame change of an animation is not equivalent to using any such alterations to represent the degree of change in the state of a software container that is depicted by animation. In a system that merely alters the color or rate of frame change of an animation, the color or rate of frame change may be arbitrarily modified by the particular program controlling the animation and is not tied to what is occurring in a software container.

In systems and methods consistent with the present invention, however, as the state of a software container changes, the color, tempo, motion, or size of an animation may also be automatically changed to give a user an idea of the degree of the change in the state of the container. Accordingly, the references cited by the Examiner do not disclose using one of color

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variations, tempo, motion, and change in size to represent the degree of change in the state of the container.

Furthermore, Appellants respectfully submit that the Examiner has failed to establish a proper suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to combine the reference teachings. The Examiner's stated motivation of signaling information regarding object state while reducing the need for the user to change physical position for the entering of input and the viewing of an output display is an impermissible use of hindsight based on the Appellants' invention.

Also, the Examiner's rejection is unclear as to exactly what claim limitation(s) is/are missing from each reference and exactly how the references should be combined. For example, the Examiner asserted that Baecker et al., in view of Johnston, Jr. et al. in view of Gudmundson fail to teach "using the rate of change the rate that new frame are displayed during animation when determining the quality of animation required for a given procedure." March 28, 2001, Office Action, page 6, lines 19-21.

None of the claims, however, include similar language, making the rejection vague. Instead, the Examiner made a series of naked obviousness statements directed to the claim elements. These statements of obviousness do not include a suggestion or motivation to modify or combine the references and are not proper. Appellants respectfully submit that the Examiner has failed to provide a prima facie case of obviousness, and, therefore, claims 5, 11, and 17 are patentable over the cited references.

Claims 6, 12, and 18 depend from claims 3, 9, and 15, respectively, and require the use of one of color variations, tempo, motion, and change in size to reflect the number or type of the

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objects in the container. These claims are patentable, at least, in view of their dependence from claims 3, 9, and 15, respectively. Similar to the argument presented above with respect to claims 5, 11, and 17, the ability to alter the color or rate of frame change of an animation is not equivalent to using those alterations to reflect the number or type of the objects in a software container that is depicted by that animation. In a system that merely alters the color or rate of frame change of an animation, the color or rate of frame change may be arbitrarily modified by the particular program controlling the animation and is not tied to what is occurring in a software container.

In systems and methods consistent with the present invention, however, as the state of a software container changes, the color, tempo, motion, or size of an animation may also be automatically changed to give a user an idea of the number or type of objects in the container. Accordingly, the references cited by the Examiner do not disclose using one of color variations, tempo, motion, and change in size to reflect the number or type of the objects in the container.

Furthermore, Appellants respectfully submit that the Examiner has failed to establish a proper suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to combine the reference teachings. The Examiner's stated motivation of signaling information regarding object state while reducing the need for the user to change physical position for the entering of input and the viewing of an output display is an impermissible use of hindsight based on the Appellants' invention. Appellants respectfully submit that the Examiner has failed to provide a prima facie case of obviousness, and, therefore, claims 6, 12, and 18 are patentable over the cited references.

Claims 9 and 15 depend from claims 7 and 13, respectively, and require that the cyclical

display reflects the numbers and types of the objects. These claims are patentable, at least, in view of their dependence from claims 7 and 13, respectively.

D. The Examiner's Rejection of Claims 7, 19-21, 25 and 30 Under 35 U.S.C. § 103(a) as Being Unpatentable Over <u>Johnston, Jr. et al.</u> Must Be Reversed Because 1) the References Do Not Teach or Suggest (i) Determining Based on the Detected Event Whether an Animated Sequence Does Not Reflect the State of the Container, and (ii) Detecting Activity of the Closed Container and Updating an Animated Sequence so as to Reflect Activity of the Closed Container; and 2) the Examiner Did Not Satisfy the Initial Burden of Factually Supporting a Prima Facie Case of Obviousness.

Appellants traverse the rejection of claims 7, 19-21, 25 and 30 under 35 U.S.C. § 103(a) as being unpatentable over <u>Johnston, Jr. et al.</u>

The Examiner's rejection should be reversed because <u>Johnston, Jr. et al.</u> fail to teach or suggest 1) determining based on the detected event whether an animated sequence does not reflect the state of the container, and 2) detecting activity of the closed container and updating an animated sequence so as to reflect activity of the closed container. In addition to the deficiencies in showing the features of Appellants' claimed invention, the rejection of claims 7, 19-21, 25 and 30 are improper because the Examiner did not establish a proper suggestion or motivation to modify the reference teachings.

Claim 7 is drawn to a computer system that includes a memory with a software container and an animated indicator program. The animated indicator program includes computer code for monitoring the software container to detect an event reflecting a change in a state of the container, for determining based on the detected event whether an animated sequence does not reflect the state of the container, and for generating a series of frames to reflect a state of the container based on the determination.

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Appellants respectfully submit that the Examiner has failed to establish a prima facie case of obviousness with respect to claim 7. On page 8 of the Office Action dated March 28, 2001, the Examiner alleged that Johnston, Jr. et al. disclose, among other things, displaying state changes which correspond with state changes, detecting changing of software state through the use of active animation, and cyclically displaying an animated sequence in the form of a rotating button. The Examiner cited no reference as teaching the step of determining based on the detected event whether an animated sequence does not reflect the state of the container. The "find" button in the Johnston, Jr. et al. reference is relied on by the Examiner as showing an animated sequence that reflects the state of a container. There is nothing at all in Johnston, Jr. et al., however, that discloses or suggests determining whether the "find" button does not reflect the state of a container. The Examiner appears to have attempted to overcome this deficiency of Johnston, Jr. et al. by stating that it would have been obvious to provide such a determination because doing so enables the computer programmer to provide a user-friendly method for the software user to track software states.

Appellants submit that the Examiner has not provided an adequate motivation to modify Johnston, Jr. et al. to include the determination. The "find" button is nothing more than a trigger for activating a function to be performed. Appellants submit that one of ordinary skill in the art would not be motivated to determine whether this find button reflects the state of a software container. The Examiner's argument on page 15 of the March 28, 2001, Office Action, that the trigger for activating a function is a trigger for detecting an event, is unclear and does not seem relevant to whether Johnston, Jr. et al. disclose determining based on the detected event whether an animated sequence does not reflect the state of the container.

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Furthermore, Appellants submit that animation only while the state is being changed is not sufficient to teach determining whether an animated sequence does not reflect the state of the container. Animating only while the state is being changed might be evidence that an update of the animated sequence occurs, but does not prove that a separate determination occurs. The present invention includes both a determination and an update. Accordingly, Johnston, Jr. et al. does not disclose or suggest determining based on the detected event whether an animated sequence does not reflect the state of the container. Appellants respectfully submit that the Examiner has failed to provide a prima facie case of obviousness, and, therefore, claim 7 is patentable over the cited reference.

Claim 19 is drawn to a process for reflecting activity of a software container that is closed, comprising, detecting activity of the closed container, and updating an animated sequence so as to reflect activity of the closed container. Appellants respectfully submit that Johnston et al. does not disclose or suggest this claimed combination of steps. Among other things, the reference does not disclose or suggest detecting activity of the closed container, and updating an animated sequence so as to reflect activity of the closed container.

The Examiner indicated that it would have been obvious to include these steps in Johnston et al. Appellants respectfully disagree with that position. There is no teaching or suggestion in Johnston et al. to modify its system so that activity of the closed container is detected, and an animated sequence of the closed container is updated so as to reflect activity. Johnston et al. discloses detecting the activity of a menu item (i.e., a button), and that an animated sequence is updated so as to reflect activity of a button. A button is in no way analogous to a container. Moreover, a simple radial button cannot be considered a closed

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container. Accordingly, there is no suggestion in <u>Johnston et al.</u> as to why one of ordinary skill in the art would modify the system of <u>Johnston et al.</u> so that activity of the closed container is detected, and an animated sequence of the closed container is updated so as to reflect activity. Appellants respectfully submit that the Examiner has failed to provide a prima facie case of obviousness, and, therefore, claim 19 is patentable over the cited reference.

Claim 20 depends from claim 19, and requires that the animated sequence is displayed. This claim is patentable, at least, in view of its dependence from claim 19.

Claim 21 depends from claim 20, and requires the step of opening the container and interrupting the display of the animated sequence when the container is opened. This claim is patentable, at least, in view of its dependence from claim 20.

Claim 25 is drawn to a computer readable medium containing instructions executable on a computer. The instructions are executable to perform a method substantially the same as that described above in claim 19. Accordingly, Appellants respectfully submit that this claim is patentable for at least the reasons given with respect to claim 19.

Claim 30 depends from claim 7, and requires that the frames include characteristics that are symbolic of objects of the container. This claim is patentable, at least, in view of its dependence from claim 7.

E.   The Examiner's Rejection of Claims 22-24 and 26 Under 35 U.S.C. § 103(a) as Being Unpatentable Over STN Express in View of Johnston, Jr. et al. in View of Nguyen et al. Must Be Reversed Because 1) the References Do Not Teach or Suggest Updating an Animated Sequence to be Displayed on the First Computer System so as to Reflect the Actions of the Second Computer System; and 2) the Examiner Did Not Satisfy the Initial Burden of Factually Supporting a Prima Facie Case of Obviousness.

Appellants traverse the rejection of claims 22-24 and 26 under 35 U.S.C. § 103(a) as being unpatentable over STN Express in view of Johnston, Jr. et al. in view of Nguyen et al.

The Examiner's rejection should be reversed because STN Express, Johnston, Jr. et al., and Nguyen et al. alone or in combination, fail to teach or suggest updating an animated sequence to be displayed on the first computer system so as to reflect the actions of the second computer system. In addition to the deficiencies in showing the features of Appellants' claimed invention, the rejection of claims 22-24 and 26 are improper because the Examiner did not establish a proper suggestion or motivation to combine the reference teachings. Moreover, the Examiner has ignored Appellants' request that the Examiner provide a reference proving the veracity of the Examiner's statement that several claim limitations are widely acceptable in the art.

Claim 22 is drawn to a process for reflecting activity of a network-based software container associated with a first computer system. The process involves detecting if a second computer system has acted upon the container, and updating an animated sequence to be displayed on the first computer system so as to reflect the actions of the second computer system.

Appellants respectfully submit that the Examiner has failed to establish a prima facie case of obviousness with respect to claim 22. On pages 10-11 of the Office Action dated March 28,

2001, the Examiner alleged that STN Express discloses, among other things, providing an emulator for a PC which emulates actions of a mainframe allowing a user on the PC to view actions of the mainframe, providing a status bar on the PC screen with the word 'online' or 'online' depending on whether the emulator is connected to the mainframe, displaying the word 'online' in green when the mainframe awaits input from the PC user, and displaying the word 'online' in red when the user is instructed to wait for output from the mainframe after data is entered. The Examiner argued that the use of an emulator by STN Express can be interpreted as a method where a first computer has acted upon a software container in a second computer.

Furthermore, the Examiner indicated that STN Express does not disclose coupling a database on a different server computer with a user computer equipped with a browser where the user requests information from the database server. The Examiner relied on Nguyen et al. to teach that feature. The Examiner also alleged that Nguyen et al. provide animated icons on an Internet server wherein the user of a second computer system accessing the server can execute software stored on the server from the second computer system. The Examiner then asserted that it would have been obvious to update an animated sequence to be displayed on the first computer system so as to reflect the actions of the second computer system, because doing so is a widely accepted method for allowing a user to view a copy of the output of a first computer from a second computer. The Examiner never mentioned how Johnston, Jr. et al. applied to the rejection.

Appellants respectfully submit that STN Express and Nguyen et al. (and Johnston, Jr. et al. to the extent it may be applicable recognizing the Examiner's failure to explain why it might be applicable) do not disclose or suggest updating an animated sequence to be displayed on the

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first computer system so as to reflect the actions of the second computer system. The Examiner relied on Nguyen et al. to help provide a teaching of updating an animated sequence to be displayed on the first computer system so as to reflect the actions of the second computer system. Nguyen et al., however, disclose a general discussion of Sun's Java language, including an indication that Java enables use of animated icons and/or Web documents with animations. Nguyen et al. provide no indication as to what the animation may represent or reflect.

In contrast, systems and methods consistent with the present invention update an animated sequence to be displayed on a first computer system so as to reflect the actions of a second computer system. Nothing in the Nguyen et al. reference teaches or suggests that the disclosed animations present on one computer system are updated to reflect actions of a different computer system.

Further, there is no teaching or suggestion in STN Express of updating an animated sequence to be displayed on the first computer system so as to reflect the actions of the second computer system. STN Express does not show any animation at all, let alone updating an animated sequence to reflect actions of another computer. Accordingly, STN Express, and Nguyen et al. do not disclose or suggest, alone or in combination, updating an animated sequence to be displayed on the first computer system so as to reflect the actions of the second computer system.

Additionally, the Examiner has failed to establish a proper suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to combine the reference teachings. The Examiner's rejection is unclear as to exactly what claim limitation(s) is/are missing from each reference and exactly how the

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references should be combined. For example, the Examiner asserted that <u>STN Express</u> fails to teach coupling a database on a different server computer with a user computer equipped with a browser where the user requests information from the database server. None of the claims, however, include similar language, making the rejection vague. Instead, the Examiner made a series of naked obviousness statements directed to the claim elements. These statements of obviousness do not include a suggestion or motivation to modify or combine the references and are not proper. Appellants respectfully submit that the Examiner has failed to provide a prima facie case of obviousness, and that therefore, claim 22 is patentable over the cited references.

Moreover, on page 16 of the March 28, 2001, Office Action the Examiner alleged that it is widely acceptable in the art for Internet terminals to display actions that reflect actions of corresponding servers. The Examiner also alleged that these actions often include animated sequences to be displayed on the first computer system so as to reflect actions of the computer system. Appellants submit that the Examiner's allegations are not widely acceptable, and request the Examiner to produce a reference proving the veracity of his statements. Appellants' previous request to produce a reference, in the Request for Reconsideration dated February 16, 2001, has been ignored by the Examiner.

Regarding the <u>Johnston, Jr. et al.</u> reference, the Examiner failed to explain how the reference is applicable to the rejection of claim 22. As such, Appellants' arguments with respect to claim 22 do not address <u>Johnston, Jr. et al.</u> in detail, because there is no way of knowing exactly how the Examiner believes the reference is relevant. Appellants submit that due to this deficiency, the rejection of claim 22 is defective, and <u>Johnston, Jr. et al.</u> should be removed as part of the grounds for rejection.

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Claim 23 depends from claim 22, and requires that the first computer system and the second computer system are connected to the Internet. This claim is patentable, at least, in view of its dependence from claim 22.

Claim 24 depends from claim 22, and requires the step of displaying the animated sequence on the first computer system. This claim is patentable, at least, in view of its dependence from claim 22.

Claim 26 is drawn to a computer readable medium containing instructions executable on a computer. The instructions are executable to perform a method substantially the same as that described above in claim 22. Accordingly, Appellants respectfully submit that this claim is patentable for at least the reasons given with respect to claim 22.

F.   The Examiner's Rejection of Claims 27 and 28 Under 35 U.S.C. § 103(a) as Being Unpatentable Over <u>Baecker et al.</u> in View of <u>STN Express</u> in View of <u>Lagarde et al.</u> in View of <u>Johnston, Jr. et al.</u> Must Be Reversed Because 1) the References Do Not Teach or Suggest (i) Detecting Activity of the Closed Container and Updating an Animated Sequence so as to Reflect Activity of the Closed Container, and (ii) Updating an Animated Sequence to be Displayed on the First Computer System so as to Reflect the Actions of the Second Computer System; and 2) the Examiner Did Not Satisfy the Initial Burden of Factually Supporting a Prima Facie Case of Obviousness.

Appellants traverse the rejection of claims 27 and 28 under 35 U.S.C. § 103(a) as being unpatentable over <u>Baecker et al.</u> in view of <u>STN Express</u> in view of <u>Lagarde et al.</u> in view of <u>Johnston, Jr. et al.</u>

The Examiner's rejection should be reversed because <u>Baecker et al.</u>, <u>STN Express</u>, <u>Lagarde et al.</u>, and <u>Johnston, Jr. et al.</u> alone or in combination, fail to teach or suggest 1) detecting activity of the closed container and updating an animated sequence so as to reflect activity of the closed container, and 2) updating an animated sequence to be displayed on the first

computer system so as to reflect the actions of the second computer system. In addition to the deficiencies in showing the features of Appellants' claimed invention, the rejection of claims 27 and 28 are improper because the Examiner did not establish a proper suggestion or motivation to combine the reference teachings.

With respect to the rejections of claims 27 and 28, Appellants submit that these rejections are very confusing. On page 12 of the March 28, 2001, Office Action, the Examiner stated that he was rejecting claims 27 and 28 under 35 U.S.C. § 103(a) as being unpatentable over Baecker et al., STN Express, Lagarde et al. and Johnston, Jr. et al. An inspection of the body of the rejection, however, revealed that the Examiner actually applied Baecker et al., STN Express, and Johnston, Jr. et al. The Examiner never mentioned how Lagarde et al. applied to the rejection.

Moreover, Appellants are confused as to why Nguyen et al. was used in rejecting claim 22, but not claim 28. Both claim 22 and 28 include the steps of detecting if a second computer system has acted upon the container, and updating an animated sequence to be displayed on the first computer system so as to reflect the actions of the second computer system. But the rejection to claim 28 does not include Nguyen et al. as part of the grounds for rejection, even though Nguyen et al. is seemingly used by the Examiner to help teach updating an animated sequence to be displayed on the first computer system so as to reflect the actions of the second computer system. These inconsistent positions make it difficult to understand exactly how the Examiner believes each reference is applicable to the rejections.

Claim 27 is drawn to a computer system comprising a memory containing code for performing a process similar to that described above with reference to claim 19. Accordingly, Appellants respectfully submit that this claim is patentable for at least the reasons given with

respect to claim 19.

In addition to the arguments presented above with respect to claim 19, explaining that Johnston, Jr. et al. do not disclose or suggest detecting activity of a closed container, and updating an animated sequence so as to reflect activity of the closed container, Appellants further assert that neither Baecker et al. nor STN Express (and Lagarde et al. to the extent it may be applicable recognizing the Examiner's failure to explain why it might be applicable) disclose or suggest these elements.

On page 13, of the March 28, 2001, Office Action, the Examiner indicated that Baecker et al. do not disclose a method for allowing one computer to reflect the actions of another, and relied on STN Express to teach that feature. The Examiner also alleged that it would have been obvious to provide a memory containing code for detecting activity of a closed software container and code for updating an animated sequence so as to reflect activity of the closed container, because doing so allows the user to run and view the running of multiple programs on the local computer workstation.

Baecker et al. disclose a method and means for generating and displaying a content-based depiction of a standard icon. The depiction, which may be displayed in animated form, is generated upon the occurrence of a predetermined event, such as the closure of the document or filed associated with the icon (col. 3, lines 15-20). In contrast, systems and methods consistent with the present invention detect activity of a closed container and update an animated sequence so as to reflect activity of the closed container. The system of Baecker et al. does not detect the activity of the closed document or file associated with the icon and update the animated depiction accordingly. Accordingly, Baecker et al. do not disclose or suggest detecting activity of a closed

container, and updating an animated sequence so as to reflect activity of the closed container.

The teachings of <u>STN Express</u> are not sufficient to make up for the deficiencies of <u>Baecker et al.</u> and <u>Johnston, Jr. et al.</u> The Examiner utilized <u>STN Express</u> to help provide a teaching of allowing one computer to reflect the actions of another computer (the Examiner mentioned claim 22 in rejecting claim 27, which does not make sense in view of their differing claim language). This teaching is irrelevant to detecting activity of a closed container, and updating an animated sequence so as to reflect activity of the closed container. The Examiner has pointed to nothing in <u>STN Express</u>, nor can the Appellants find anything in <u>STN Express</u> that discloses or suggests these elements. Accordingly, <u>Baecker et al.</u>, <u>STN Express</u>, and <u>Johnston, Jr. et al.</u>, do not teach or suggest, alone or in combination, detecting activity of a closed container, and updating an animated sequence so as to reflect activity of the closed container. Appellants respectfully submit that the Examiner has failed to provide a prima facie case of obviousness, and that therefore, claim 27 is patentable over the cited references.

Additionally, the Examiner has failed to establish a proper suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to combine the reference teachings. The Examiner's rejection is unclear as to exactly what claim limitation(s) is/are missing from each reference and exactly how the references should be combined. For example, the Examiner asserted that <u>Baecker et al.</u> fail to teach a method for allowing one computer to reflect the actions of another. Claim 27, however, does not include similar language, making the rejection vague. Instead, the Examiner made a series of naked obviousness statements directed to the claim elements. These statements of obviousness do not include a suggestion or motivation to modify or combine the references and

are not proper. Appellants respectfully submit that the Examiner has failed to provide a prima facie case of obviousness, and that therefore, claim 27 is patentable over the cited references.

Claim 28 is drawn to a computer system comprising a memory containing code for performing a process similar to that described above with reference to claim 22. Accordingly, Appellants respectfully submit that this claim is patentable for at least the reasons given with respect to claim 22 in section E above. In addition to the arguments presented above with respect to claim 22, explaining that STN Express does not disclose or suggest updating an animated sequence to be displayed on the first computer system so as to reflect the actions of the second computer system, Appellants further assert that neither Baecker et al. nor Johnston, Jr. et al. (and Lagarde et al. to the extent it may be applicable recognizing the Examiner's failure to explain why it might be applicable) disclose or suggest this element.

The Examiner admitted that Baecker et al. fail to teach a method for allowing one computer to reflect actions of another, but indicated that both Baecker et al. and Johnston, Jr. et al. disclose displaying animation. The Examiner has pointed to nothing in Baecker et al. or Johnston, Jr. et al., nor can the Appellants find anything in Baecker et al. or Johnston, Jr. et al. that discloses or suggests updating an animated sequence to be displayed on the first computer system so as to reflect the actions of the second computer system. Accordingly, Baecker et al., STN Express, and Johnston, Jr. et al., do not teach or suggest, alone or in combination, updating an animated sequence to be displayed on the first computer system so as to reflect the actions of the second computer system.

Regarding the Lagarde et al. reference, the Examiner failed to explain how the reference is applicable to the rejection of claims 27 and 28. As such, Appellants' arguments with respect

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to claims 27 and 28 do not address <u>Lagarde et al.</u> in detail, because there is no way of knowing exactly how the Examiner believes the reference is relevant. Appellants submit that due to this deficiency, the rejection of claims 27 and 28 is defective, and <u>Lagarde et al.</u> should be removed as part of the grounds for rejection.

G.   The Examiner's Rejection of Claim 8 Under 35 U.S.C. § 103(a) as Being Unpatentable Over <u>Johnston, Jr. et al.</u> in View of <u>Gallagher</u> Must Be Reversed Because the Examiner Did Not Satisfy the Initial Burden of Factually Supporting a Prima Facie Case of Obviousness.

Appellants traverse the rejection of claim 8 under 35 U.S.C. § 103(a) as being unpatentable over <u>Johnston, Jr. et al.</u> in view of <u>Gallagher</u>. The Examiner's rejection should be reversed because the Examiner did not establish a proper suggestion or motivation to combine the reference teachings.

Claim 8 depends from claim 7, and requires that the cyclical display provides an intuitive representation of a degree of the change in the state of the container. This claims is patentable, at least, in view of its dependence from claim 7 and for the reasons set forth with respect to claims 2 and 5 above.
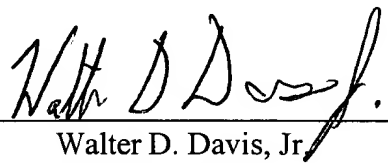
IX. CONCLUSION

In view of the foregoing, it is respectfully submitted that the final rejection of claims 1-32 should be reversed, and such reversal is respectfully requested.

To the extent any extension of time under 37 C.F.R. § 1.136 is required to obtain entry of this Appeal Brief, such extension is hereby respectfully requested. If there are any fees due under 37 C.F.R. §§ 1.16 or 1.17 which are not enclosed herewith, including any fees required for an extension of time under 37 C.F.R. § 1.136, please charge such fees to our Deposit Account No. 06-0916.

Respectfully submitted,

FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER, L.L.P.

By: _____
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APPENDIX

1.   A process for reflecting a state of a software container having objects, comprising:

cyclically displaying a series of frames reflecting a state of the container as an animated sequence;

detecting an event reflecting a change in the state of the container;

determining based on the detected event whether an animated sequence does not reflect the state of the container; and

updating the cyclical display based on the determination.

2.   The process of claim 1, wherein the cyclical display provides an intuitive representation of a degree of the change in the state of the container.

3.   The process of claim 1, wherein the cyclical display reflects the numbers and types of the objects.

4.   The process of claim 1, wherein the cyclical display embeds audio information in the generated frames.

5.   The process of claim 2, wherein the cyclical display uses one of color variations, tempo, motion, and change in size to represent the degree of the change in the state of the container.

6.   The process of claim 3, wherein the cyclical display uses color variations, tempo,

motion, and change in size to reflect the number or type of the objects in the container.

7.   A computer system comprising:

a memory including a software container and an animated indicator program, the animated indicator program including computer code for monitoring the software container to detect an event reflecting a change in a state of the container, for determining based on the detected event whether an animated sequence does not reflect the state of the container, and for generating a series of frames to reflect a state of the container based on the determination;

a display on which a series of frames is cyclically displayed in an animated sequence; and

a processor configured to execute programs in the memory.

8.   The computer system of claim 7, wherein the cyclical display provides an intuitive representation of a degree of the change in the state of the container.

9.   The computer system of claim 7, wherein the cyclical display reflects the number and type of objects of the container.

10.   The computer system of claim 7, wherein the animated indicator program further includes computer code for embedding audio information in the generated frames.

11.   The computer system of claim 8, wherein the animated indicator program further includes computer code for using one of color variations, tempo, change in size, and motion to

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represent the degree of the change in the state of the container.

12.   The computer system of claim 9, wherein the animated indicator program further includes computer code for using color variations, tempo, change in size, and motion to reflect the number or type of the objects in the container.

13.   A computer readable medium containing instructions executable on a computer, the instructions when executed on the computer performing the steps of:

cyclically displaying a series of frames in an animated sequence such that the animated sequence reflects a state of a software container;

detecting an event reflecting a change in the state of the container;

determining based on the detected event whether an animated sequence does not reflect the state of the container; and

updating the cyclical display based on the determination.

14.   The computer readable medium of claim 13, wherein the instructions for the cyclical display cause the cyclical display to provide an intuitive representation of a degree of the change in the state of the container.

15.   The computer readable medium of claim 13, wherein the instructions for the cyclical display cause the cyclical display to reflect the number and type of objects of in the container.

16.   The computer readable medium of claim 13, further including instructions for embedding audio information in the cyclical display.

17.   The computer readable medium of claim 14, further including instructions for using one of color variations, tempo, motion, and change in size to represent the degree of the change in the state of the container.

18.   The computer readable medium of claim 15, further including instructions for using one of color variations, tempo, motion, and change in size to reflect the number or type of objects in the container.

19.   A process for reflecting activity of a software container that is closed, comprising:

detecting activity of the closed container; and

updating an animated sequence so as to reflect activity of the closed container.

20.   The process according to claim 19, further comprising:

displaying the animated sequence.

21.   The process according to claim 20, further comprising:

opening the container and interrupting the display of the animated sequence when the container is opened.

22.   A process for reflecting activity of a network-based software container associated with a first computer system, comprising:

detecting if a second computer system has acted upon the container; and

updating an animated sequence to be displayed on the first computer system so as to reflect the actions of the second computer system.

23.   The process according to claim 22, wherein the first computer system and the second computer system are connected to the Internet.

24.   The process according to claim 22, further comprising displaying the animated sequence on the first computer system.

25.   A computer readable medium containing instructions executable on a computer, the instructions when executed on the computer perform a process for reflecting activity of a software container that is closed, including:

detecting activity of the closed container; and

updating an animated sequence so as to reflect activity of the closed container.

26.   A computer readable medium containing instructions executable on a computer, the instructions when executed on the computer perform a process for reflecting activity of a network-based software container associated with a first computer system, including:

detecting if a second computer system actions has acted upon the container; and

updating an animated sequence to be displayed on the first computer system so as to reflect the actions of the second computer system.

27.   A computer system, comprising:

a memory containing code for performing a process for reflecting activity of a software container that is closed, including code for detecting activity of the closed container and code for updating an animated sequence so as to reflect activity of the closed container;

a display to display the animated sequence; and

a processor configured to execute programs in the memory.

28.   A computer network, comprising:

a memory in a first computer containing code for performing a process for reflecting activity of a network-based software container associated with the first computer system, including code for detecting if a second computer system has acted upon the container, and code for updating an animated sequence to be displayed on the first computer system so as to reflect the actions of the second computer system;

a display to display the animated sequence; and

a processor configured to execute programs in the memory.

29.   The process of claim 1, wherein the frames include characteristics that are symbolic of objects of the container.

30.   The computer system of claim 7, wherein the frames include characteristics that are symbolic of objects of the container.

31.   The computer readable medium of claim 13, wherein the frames include characteristics that are symbolic of objects of the container.

32.   A process for reflecting a state of a software container having objects, comprising:

cyclically displaying a series of frames reflecting a state of the container as an animated sequence;

detecting an event reflecting a change in the state of the container, wherein the container is a web page related to user discussion;

determining based on the detected event whether an animated sequence does not reflect the state of the container; and

updating the cyclical display based on the determination.